

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A digital video data outputting apparatus in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs; and

an encoder for encoding the output of the output signal selector; ~~and~~

~~a digital visual interface (DVI) decoder for receiving and decoding DVI video data output from the encoder.~~

2. (Previously Presented) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes a video decoder for decoding a TV signal.

3. (Previously Presented) A digital video data outputting apparatus in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs; and

an encoder for encoding the output of the output signal selector, wherein any one of the data converters includes:

a video decoder for decoding a TV signal, and

a color coordinate transformer for transforming an output of the video decoder into digital RGB data to apply the data to the output signal selector.

4. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes [[is]] a component processor for receiving and processing a DVD signal.

5. (Previously Presented) A digital video data outputting apparatus in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs; and

an encoder for encoding the output of the output signal selector, wherein any one of the data converters includes:

a component processor for receiving and processing a DVD signal, and

a color coordinate transformer for transforming an output of the component processor into digital RGB data to apply the transformed data to the output signal selector.

6. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes [[is]] an A/D converter for receiving and decoding an analog RGB signal into digital RGB data.

7. (Canceled)

Reply to Office Action dated May 14, 2008

8. (Previously Presented) A digital video data outputting apparatus in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs;

an encoder for encoding the output of the output signal selector; and

a selecting circuit for selecting an output of one of the data converters for display, wherein a signal based on the output selected by the selecting circuit is input into the output signal selector.

9. (Previously Presented) The digital video data outputting apparatus as claimed in claim 1, further comprising:

a selecting circuit for selecting an output of the DVI decoder or an output of one of the data converters for display, wherein a signal based on the output selected by the selecting circuit is input into the output signal selector.

10. (Previously Presented) The digital video data outputting apparatus as claimed in claim 9, wherein a plurality of selecting circuits are provided to select one of the outputs of the data converters or an output of the DVI decoder.

11. (Previously Presented) The digital video data outputting apparatus as claimed in claim 8, further comprising:

a scaler connected between the selecting circuit and output signal selector for scaling an output of the selecting circuit, the scaler to apply the scaled output to the output signal selector.

12. (Previously Presented) A digital video data outputting apparatus in a display appliance, comprising:

one or more first data converters for converting a first plurality of analog video signals into digital video data;

a signal detector for detecting an input state of video signals inputted to at least one of the first data converters;

a switching unit for receiving video data outputted from the first data converters and selecting the video data according to the detected result of the signal detector;

second data converters for converting a second plurality of analog video signals into digital video data;

at least one multiplexer for selecting video data outputted from the switching unit and the second data converters;

a scaler for scaling the digital video data outputted from the at least one multiplexer;

an output signal selector for selecting any one of digital video data outputted from the scaler, the digital video data outputted from one of the first data converters, or the digital video data outputted from one of the second data converters;

a digital visual interface (DVI) encoder for DVI-encoding the digital video data outputted from the output signal selector; and

a controller for controlling the output signal selector.

13. (Previously Presented) The digital video data outputting apparatus as claimed in claim 12, further comprising:

a color coordinate transformer, connected between one of the second converters and the output signal selector, for color coordinate transforming an output of said one of the second data converters.

14. (Currently Amended) A method for outputting digital video data in a display appliance, comprising:

a) converting video signals inputted to the display appliance into a plurality of digital video data signals of one or more predetermined formats;

b) selecting one of the digital video data signals and digital visual interface (DVI)-encoding the selected data signal; and

c) outputting the DVI-encoded digital video data signal, wherein ~~[[b)]]~~the selecting includes selecting one of the digital video data signals based on whether a predetermined input terminal of the display appliance has received one of said video signals.

15. (Currently Amended) The method for outputting digital video data as claimed in claim 14, further comprising:

selecting one or more of the digital video data signals converted into one of the predetermined formats; and

processing the selected digital video data signal to be displayed, wherein ~~[[b)]]~~the selecting includes selecting the processed video data signal or one of the digital video data signals converted into one of the predetermined formats.

16. (Previously Presented) The method for outputting digital video data as claimed in claim 15, wherein processing the selected digital video data to be displayed is performed by a scaling process.

17. (Canceled)

18. (Currently Amended) ~~[[The]]~~A method for outputting digital video data ~~as claimed in claim 14~~in a display appliance comprising:

a) converting video signals inputted to the display appliance into a plurality of digital video data signals of one or more predetermined formats;

b) selecting one of the digital video data signals and digital visual interface (DVI)-encoding the selected data signal; and

c) outputting the DVI-encoded digital video data signal, wherein the selecting includes selecting one of the digital video data signals based on whether a predetermined input terminal of the display appliance has received one of said video signals, wherein the video signals input into the display appliance ~~includes-include~~ at least one of a TV signal, a DVD signal, an analog RGB signal, or a DVI video data, and

wherein said method further comprises color-converting digital video data corresponding to at least one of the TV or the DVD signal, and wherein the selecting includes selecting the at least one color-converted digital video data signal or other ones of the digital video data signals converted into one of the predetermined formats.

19. (Previously Presented) The method for outputting digital video data as claimed in claim 18, wherein the TV signal is decoded and converted into one of the predetermined formats of digital video data, the DVD signal is component-processed and is converted into one of the predetermined formats of digital video data, the analog RGB signal is converted into one

of the predetermined formats of digital video data, and the DVI video data is DVI decoded into one of the predetermined given formats of digital video data.

20. (Canceled)

21. (Previously Presented) The digital video data outputting apparatus as claimed in claim 12, wherein the first data converters include an analog-to-digital converter and a DVI decoder.

22. (Previously Presented) The digital video data outputting apparatus as claimed in claim 12, wherein said input state includes one of a first state indicative of no video signals input into said at least one of the first data converters and a second state indicative of the presence of video signals input into said at least one of the first data converters.

23. (Currently Amended) An apparatus, comprising:

a plurality of converters to convert different analog video signals into respective digital video data signals;

a detector to detect whether a predetermined input terminal of the apparatus has received one of said analog video signals;

a first selector to select one of the digital video data signals based on a first selection signal from the detector; and

an encoder to encode the selected digital video data signal to generate video data in a predetermined format, wherein the first selector selects one of the digital video data signals based on the first selection signal and a second selection signal, the second selection signal corresponding to one of the digital video signals output from the converters.

24. (Canceled).

25. (Currently Amended) The apparatus of claim ~~[[24]]~~23, wherein the first selector selects one of the digital video data signals based on the first selection signal, a second selection signal, and a user enable signal.

26. (Currently Amended) The apparatus of claim ~~[[24]]~~23, further comprising:
a second selector to select one of the digital video data signals for processing,
wherein the first selector selects one of the digital video data signals or the
processed digital video data signal based on the first selection signal.

27. (Currently Amended) The apparatus of claim 26, wherein the first selector selects
one of the digital video data signals or the processed digital video signal based on ~~based on the~~
first selection signal and a second selection signal, the second selection signal corresponding to
one of the digital video signals output from the converters.

28. (Currently Amended) The apparatus of claim 27, wherein the first selector selects
one of the digital video data signals based on the first selection signal, ~~[[a]]~~ the second selection
signal, and a user enable signal.

29. (Previously Presented) The apparatus of claim 26, wherein said processing
includes a scaling operation.

30. (Previously Presented) The apparatus of claim 23, wherein said predetermined
format is a digital visual interface (DVI) format.

31. (Currently Amended) ~~[[The]]~~An apparatus of claim 23, further comprising~~[[:]]~~:
a plurality of converters to convert different analog video signals into respective digital video data signals;
a detector to detect whether a predetermined input terminal of the apparatus has received one of said analog video signals;
a first selector to select one of the digital video data signals based on a first selection signal from the detector;
an encoder to encode the selected digital video data signal to generate video data in a predetermined format; and
a decoder for decoding the digital video signal output from the encoder for display.

32. (Previously Presented) The apparatus of claim 31, further comprising:
a second selector to select a signal output of the decoder or a digital video signal output from one of the converters based on the first selection signal, the signal selected by the second selector being processed for display.

33. (Previously Presented) The apparatus of claim 31, wherein said predetermined format is a digital visual interface (DVI) format and the decoder is a digital visual interface (DVI) decoder.

Reply to Office Action dated May 14, 2008

34. (Currently Amended) ~~[[The]]~~ An apparatus of claim 23 comprising:

a plurality of converters to convert different analog video signals into respective digital video data signals;

a detector to detect whether a predetermined input terminal of the apparatus has received one of said analog video signals;

a first selector to select one of the digital video data signals based on a first selection signal from the detector; and

an encoder to encode the selected digital video data signal to generate video data in a predetermined format, wherein at least one of the converters includes:

a video decoder to decode a TV signal, and

a color coordinate transformer to transform an output of the video decoder for input into the first selector.

35. (Previously Presented) The apparatus of claim 23, wherein one of the converters includes a component processor for processing a DVD signal corresponding to one of the analog video signals.

36. (Currently Amended) ~~[[The]]~~ An apparatus of claim 23 comprising:
- a plurality of converters to convert different analog video signals into respective digital video data signals;
 - a detector to detect whether a predetermined input terminal of the apparatus has received one of said analog video signals;
 - a first selector to select one of the digital video data signals based on a first selection signal from the detector; and
 - an encoder to encode the selected digital video data signal to generate video data in a predetermined format, wherein one of the converters includes:
 - a component processor to process a DVD signal corresponding to one of the analog video signal, and;
 - a color coordinate transformer to transform an output of the component processor into digital RGB data for input into the first selector.